

(C) IN THE SPECIFICATION

Please replace the paragraph starting at page 6, lines 8 and concluding at page 7, line 2, with the following.

Detector modules are comprised of an array of detector elements. Each detector module includes a high density photosensor array and a multidimensional scintillator array positioned above and adjacent to photosensor array. Particularly, scintillator array 66 includes a plurality of scintillator elements 68, while photosensor array 70 includes photodiodes 72, a switch apparatus ~~[[74]]~~ 84, and a decoder 76. A material such as a titanium dioxide--filled epoxy fills the small spaces between scintillator elements. Photodiodes 72 are individual photodiodes. In another embodiment, photodiodes 72 are deposited or formed on a substrate. Scintillator array 66, as known in the art, is positioned over or adjacent photodiodes 72. Photodiodes 72 are optically coupled to scintillator array 66 and have electrical output lines for transmitting signals representative of the light output by scintillator array 66. Each photodiode 72 produces a separate low level analog output signal that is a measurement of beam attenuation for a specific scintillator of scintillator array ~~[[54]]~~ 66. Photodiode output lines (not shown in FIG. 3 or 4) may, for example, be physically located on one side of module 60 or on a plurality of sides of module 60. In the embodiment illustrated in FIG. 4, photodiode outputs are located at opposing sides of the photodiode array.